

Work Order ID 163124

Wednesday, June 21, 2017 3:39:49 PM

163124

Page 1

Item ID: D5354-042 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: R66 Fwd Clamp Assembly, RH
 Start Date: 7/3/2017 Start Qty: 3.00 ***3*** Cust Item ID:
 Required Date: 7/5/2017 Req'd Qty: 3.00 ***3*** Customer:
 Reference:

Approvals: Process Plan:  Date: JUN 21 2017 Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D5354	C

100	BAND SAW	0.00				3	0		DAS 49 9-89 17/07/02
100									
Bandsaw	Memo	0.02							
Jeaspa Bandsaw	Cut Blanks at 4.250"								

110	HAAS CNC VERTICAL MACHINING #1	0.00				3	0		DAS 08 9-89
110									
HAAS 5AXIS	Memo	3.48							
HAAS CNC vertical machine #5	1-Machine per folio FB436 (D5354-2) DWG REV: <u>C</u> FOLIO REV: <u>AA</u>								

2- deburr and break all sharp edge as per dwg

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																				
OTHER : ☐																									

Work Order ID 163124***163124***

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Revision ID: Stop ***NS2***
Item Name: R66 Fwd Clamp Assembly, RH
Start Date: 7/3/2017 Start Qty: 3.00 ***3*** Cust Item ID:
Required Date: 7/5/2017 Req'd Qty: 3.00 ***3*** Customer:
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.08 0.50		B.F 17-07-03		3	0		DAS 08 9-89
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.06				3	0		DAS 14 9-89 17/07/06
140 *140* Outsource4 Outsource process - Anodize	Outsource process-Anodize per QSI017 4.1.10.1 Memo Issue P/O to ATG : <u>36924</u> Black Anodize as per Dwg D5354 Certification of Comformity is required.	0.00 216.00				3		JUL 05 2017	DAS 13 9-89

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
2AC 21 28				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Receive & Inspect for Damage & Mat'l Certs	0.00							
150									
Packaging	Memo	0.06							
Packaging	Certification of Conformity is required.								
155	QC5- Inspect part completeness to step on W/O	0.00							
155									
QC	Memo	0.06							
Quality Control									

3x SP17710

3

DAS
38
9-89
JUL 10 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date :		Step #:		QTY Effective :			MRB (QS1042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
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Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐																			

Wednesday, June 21, 2017 3:39:49 PM

Item ID: D5354-042

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: R66 Fwd Clamp Assembly, RH

Start Date: 7/3/2017 **Start Qty:** 3.00 ***3***

Cust Item ID:

Required Date: 7/5/2017 **Req'd Qty:** 3.00 ***3***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NB1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

160

0.00

160

3.68

Small Fab

Memo

-Assemble as per dwg.

-Secure nuts as per dwg. (Note #8)

-Apply prosal as per dwg. (Note #9)

Batch: 136953

Exp. date: 10/15

170

QC5- Inspect part completeness to step on W/O

0.00

170

QC

Memo

0.06

Quality Control

DAS

38

9-89

JUL 14 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
20-0 21 22-0									
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 163124

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163124

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Item ID: D5354-042 **Accept** ***N900040100*** **Setup Start *NS1***
Revision ID: **Stop *NS2***
Item Name: R66 Fwd Clamp Assembly, RH
Start Date: 7/3/2017 **Start Qty:** 3.00 ***3*** **Cust Item ID:**
Required Date: 7/5/2017 **Req'd Qty:** 3.00 ***3*** **Customer:**
Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run Start *NR1***
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop *NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Identify as per dwg & Stock Location: <i>SKK</i>	0.00							
180									
Packaging	Memo	0.03							
Packaging									
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.30							
Quality Control									

3 JUL 17 2017

17/7/17

DAS 21 9-89

DAS 21 9-89



DART
AEROSPACE

Work Order update only ☐

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev I

Picklist Print

Wednesday, June 21, 2017 3:39:48 PM

Page 1

Work Order ID: 163124

163124

Parent Item: D5354-042

D5354-042

Parent Item Name: R66 Fwd Clamp Assembly, RH

Start Date: 7/3/2017

Required Date: 7/5/2017

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP REV.A New issue 16/07/08 JFS Verified by: JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M6061T6B1.250X04.50
0

Purchased

No

100

f

11.9374

0.354

1.117895

DAS
49
9-89

M6061T6B1 250X04 500

6061-T6 Bar 1.25 X 4.50

**

Location

Loc Qty

Loc Code

MAT004

11.9374

m134776

0.4479

m137341

11.4895

1.05

D5316-1

Manufactured

No

160

Each

0.0000

1

3

**

(3)

17-7-14 MCL

D5316-1

T-Bolt Strap

D5351-1

Manufactured

No

160

Each

36.0000

2

6

**

17-7-14 MCL

D5351-1

T-Bolt Spacer

Location

Loc Qty

Loc Code

ST165

36

160624

36

(6)

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
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Picklist Print

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163124

Parent Item: D5354-042

D5354-042

Parent Item Name: R66 Fwd Clamp Assembly, RH

Start Date: 7/3/2017

Required Date: 7/5/2017

Start Qty: 3.00

Required Qty: 3.00

MS21043-3

Purchased

No

160

Each

636.0000

2

6

MS21043-3

**

17-7-14 MLL

Nut

Location

Loc Qty

Loc Code

FG	80	
103691	80	
FP001	119	
m136182	119	
GA	88	
m136182	88	
OVER007	300	
m137587	300	
ST302	49	
m137459	49	

NAS1149D0332J

Purchased

No

160

Each

967.0000

2

6

NAS1149D0332.J

**

17-7-14 MLL

Washer

Location

Loc Qty

Loc Code

FP	211	
m136015	8	
m137075	203	
GA	272	
m136643	272	
ST264	484	
m136015	0	
m137736	484	

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

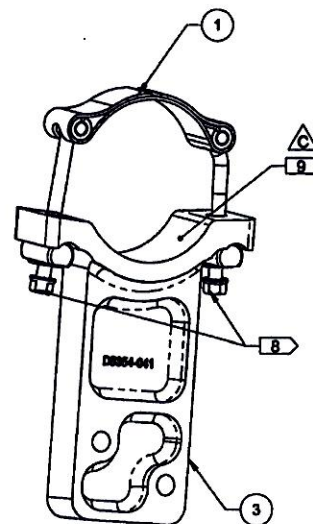
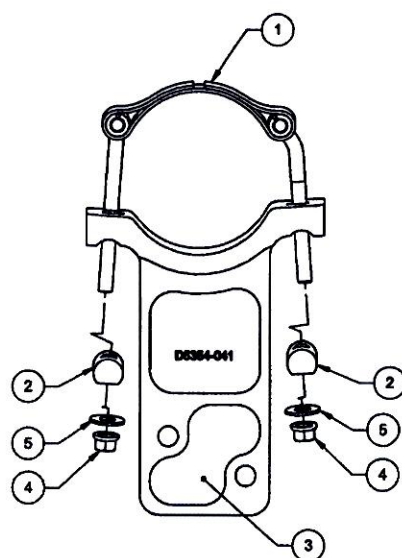


QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS							
Part No. _____		Rework ☐		Skid-tube ☐		Cross tube ☐		Water Jet ☐		Engineering ☐	
NCR No. _____		Scrap ☐		Machining ☐		Small Fab ☐		Prod. Eng. Coord. ☐		Quality ☐	
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Design ☐		Operator ☐		Bending ☐		Set-up ☐		Folio/Program ☐		Outside Dimensions ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐		Grain ☐		Over/Under tolerance ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐		Weld ☐		Part Incorrect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐		Wrong Stock Pulled ☐		Part Lost/Missing ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐		Out of Sequence ☐		Part Moved ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐		Off-set ☐		Drawing ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐		Mislabeled ☐		Finish ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐		Fit/Function ☐		Misread ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐		Misaligned/off center ☐		Turning Sequence ☐	
Past Expiry Date ☐		Manufacturing Process ☐									
Misidentified ☐		Past Due ☐		OTHER : ☐							

ITEM	QTY -041	P/N	DESCRIPTION
	X	D5354-041	R66 FWD CLAMP ASSY, LH
1	1	D5316-1	T-BOLT STRAP
2	2	D5351-1	T-BOLT SPACER
3	1	D5354-1	SUPPORT, LH
4	2	MS21043-3	NUT, SELF-LOCKING
5	2	NAS1149D0332J	WASHER
6	A/R	PROSEAL 890	SEALANT



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ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 163124

JUN 21 2017

D5354-041 R66 FWD CLAMP ASSY, LH

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: AS SHOWN ON D5354-1
- 7) WEIGHT: 0.37 lbs
- 8) SECURE NUTS WITH 1-2 THREAD AS SHOWN
- 9) APPLY AN EVEN LAYER OF PROSEAL 890 (0.02" - 0.03" THICK) ON INSIDE SURFACE

RELEASED
2017-03-22
17-535

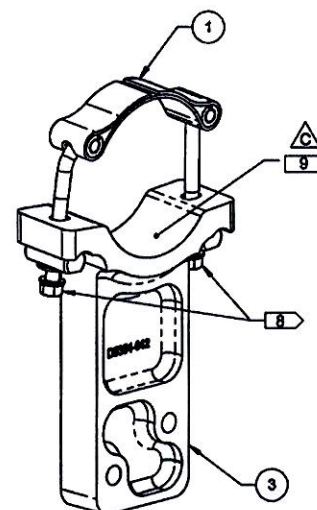
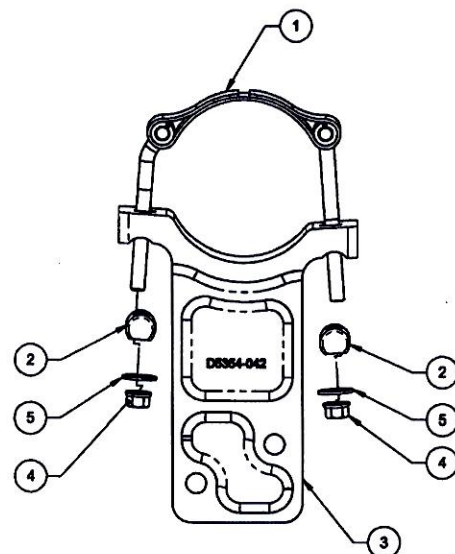
C	ADDED ENGRAVING AND REVISE NOTE 8 AND LOCATION OF PROSEAL (ZN AS-1, C3-1, AS-2 C3-2, AS-3, C2-3, C7-3, AS-4, B2-4, C6-4)	RF	17.02.09
B	REDESIGN -1/-041, ADD -2/-042, REMOVE -043 (ZN AS-1, AS-2, AS-3, AS-4); ADD NOTE 9 (ZN AS-1, AS-2)	RF	16.05.24
A	NEW ISSUE	RF	16.08.10
REV.	DESCRIPTION	BY	DATE
DESIGN	RF		
DRAWN	RF		
CHECKED	VS		
MFG. APPR.	JFS		
APPROVED	HS		
DE APPR.	DS		
DATE	17.02.09		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D5354** REV. C
SHEET 1 OF 4
TITLE **R66 FWD CLAMP ASSEMBLY** SCALE NTS

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ITEM	QTY	P/N	DESCRIPTION
	X	D5354-042	R66 FWD CLAMP ASSY, RH
1	1	D5316-1	T-BOLT STRAP
2	2	D5351-1	T-BOLT SPACER
3	1	D5354-2	SUPPORT, RH
4	2	M921043-3	NUT, SELF-LOCKING
5	2	NAS1149D0332J	WASHER
6	A/R	PROSEAL 890	SEALANT



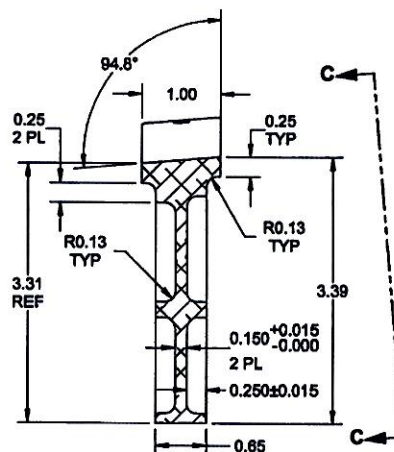
D5354-042 R66 FWD CLAMP ASSY, RH

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: AS SHOWN ON D5354-2
- 7) WEIGHT: 0.37 lbs
- 8) SECURE NUTS WITH 1-2 THREAD AS SHOWN
- 9) APPLY AN EVEN LAYER OF PROSEAL 890 (0.02" - 0.03" THICK) ON INSIDE SURFACE

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	VS	DRAWING NO.	REV. C
MFG. APPR.	JFS	D5354	SHEET 2 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	R66 FWD CLAMP ASSEMBLY	NTS
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2017-03-22
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SECTION A-A



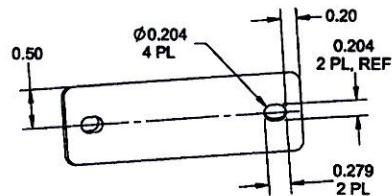
NOTES:

- NOTES:**
- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
PER QQ-A-225/B OR AMS-QQ-A-225/B (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/B OR AMS-QQ-A-200/B (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6B
 - 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH ASSEMBLY P/N, FWD & ARROW PER DART QSI 044 6.3 (CNC ENGRAVING)
USING MAX DEPTH OF 0.010 WITH MIN RADIUS OF 0.010
 - 7) WEIGHT: 0.29 lbs
 - 8) UNDEFINED FEATURES CONTROLLED BY CAD FILE D5354-1 REV. C.SLDPRT

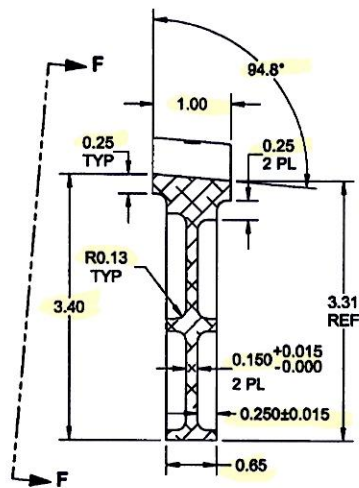
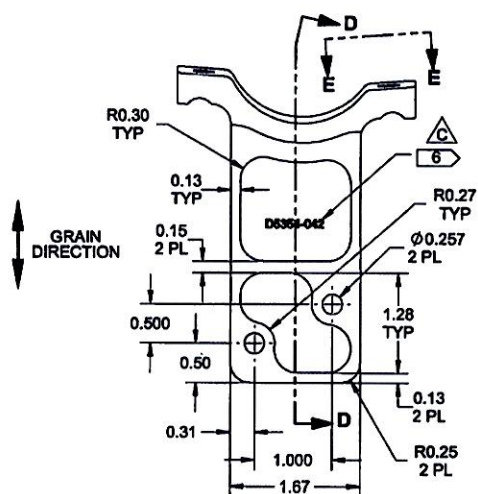
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2017-03-22

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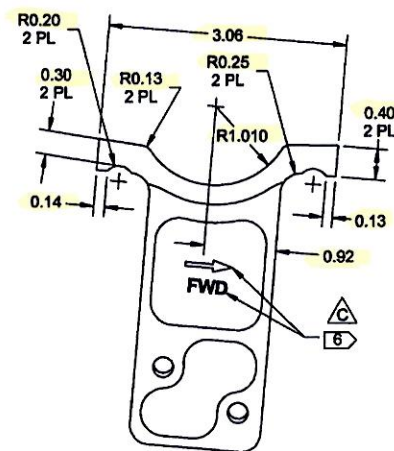
DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	VS	DRAWING NO.	REV. C
MFG. APPR.	JFS	D5354	SHEET 3 OF 3
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	R66 FWD CLAMP ASSEMBLY	NTN
DATE	17.02.09	COPYRIGHT © 2018 BY DART AEROSPACE LTD HAS DOCUMENT & FIGURES NOT BE LOANED OR REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR CLAIMED RIGHTS TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD	



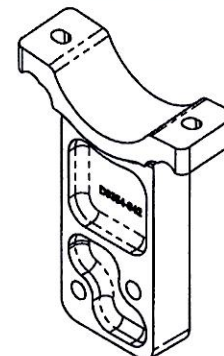
VIEW E-E
(TYPICAL)



SECTION D-D



VIEW F-F



D5354-2 SUPPORT, RH

NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T65
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH ASSEMBLY P/N, FWD & ARROW PER DART QSI 044 6.3 (CNC ENGRAVING)
USING MAX DEPTH OF 0.010 WITH MIN RADIUS OF 0.010
- 7) WEIGHT: 0.29 lbs
- 8) UNDEFINED FEATURES CONTROLLED BY CAD FILE D5354-2 REV. C.SLDPRT

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2017-03-22

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DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	VS	DRAWING NO.	REV. C
MFG. APPR.	JFS	D5354	SHEET 4 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	R66 FWD CLAMP ASSEMBLY	NTS
DATE	17.02.09	COPYRIGHT © 2015 BY DART AEROSPACE LTD	
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DART AEROSPACE LTD		Work Order: 163124
Description: SUPPORT, RH		Part Number: D5354-2
Inspection Dwg: D5354 Rev: C		Page 1 of 1

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.279	+/-0.010	0.278	✓		Vern	GA-13
0.20	+/-0.030	0.196	✓		"	"
φ0.204	+0.005/-0.001	φ0.206	✓		"	"
0.50	+/-0.030	0.499	✓		"	"
R0.27	+/-0.030	R0.270	✓		R-6	ref.
φ0.257	+0.006/-0.001	φ0.259	✓		Vern	GA-13
1.28	+/-0.030	1.275	✓		"	"
0.13	+/-0.030	0.124	✓		"	"
R0.25	+/-0.030	R0.250	✓		R-6	ref.
1.67	+/-0.030	1.670	✓		Vern	GA-13
1.000	+/-0.005	0.999	✓		H-6	31006
0.31	+/-0.030	0.309	✓		Vern	GA-13
0.50	+/-0.030	0.500	✓		"	"
0.500	+/-0.005	0.500	✓		H-6	31006
0.15	+/-0.030	0.150	✓		Vern	GA-13
0.13	+/-0.030	0.126	✓		"	"
R0.30	+/-0.030	R0.297	✓		R-6	ref.
3.40	+/-0.030	3.391	✓		H-6	31006
R0.13	+/-0.030	R0.125	✓		R-6	ref.
0.25	+/-0.030	0.248	✓		Vern	GA-13
1.00	+/-0.030	1.000	✓		"	"
94.8°	+/- 5°	94.8°	✓		Angle M.	CNC-17
0.25	+/-0.030	0.250	✓		Vern	GA-13
0.150	+0.015/-0.000	0.155	✓		Mic	118-120
0.250	+/-0.015	0.2525	✓		D-6	GA-08
0.65	+/-0.030	0.651	✓		Vern	GA-13
0.14	+/-0.030	0.138	✓		"	"
0.30	+/-0.030	0.305	✓		"	"
R0.20	+/-0.030	R0.200	✓		R-6	ref.
R0.13	+/-0.030	R0.125	✓		"	"
R1.010	+/-0.010	R1.010	✓		"	"
R0.25	+/-0.030	R0.250	✓		"	"

Measured by: DAS 08	Checked by: 14 9-89	QC Inspector:
Date: 17-07-03 9-89	Date: 17/07/06	Date:

Engineering Approval: (If necessary)	Date:
--	--------------

Rev	Date	Change	Revised by	Approved
B	14.07.31	New Issue	KJ	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO36924

Purchase Order Date 7/5/2017

PO Print Date 7/7/2017

Page Number 1 of 2

Order From :

VC-ATG001

Ship To : DART AEROSPACE LTD

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

613-446-4544

Ship To Contact

Ship To Phone

Ship Via:

VENDOR'S TRUCK

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	163123	D5354-041 CLAMP REV. C	7/7/2017 Yes 7/7/2017 FINISH: ANODIZE BLACK PER MIL-8625F TYPE I/IB/IC/II/IIB CLASS 2		3.00	\$12.50	\$37.50
Line Total:							\$37.50
2	163124	D5354-042 CLAMP REV. C	7/7/2017 Yes 7/7/2017 FINISH: ANODIZE BLACK PER MIL-8625F TYPE I/IB/IC/II/IIB CLASS 2		3.00	\$12.50	\$37.50
Line Total:							\$37.50
3	162980	D5355-041 CLAMP REV. C	7/7/2017 Yes 7/7/2017 FINISH: ANODIZE BLACK PER MIL-8625F TYPE I/IB/IC/II/IIB CLASS 2		4.00	\$12.50	\$50.00

PO Instructions: PRIMER IS SUPPLIED BY DART

Note:

7/7/2017

DAS
38
9-89

Sept 7-10



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 913508

Date: 07-Jul-17

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chantal Lavoie
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
3 ea	Part: D5354-041 Clamp Black Anodize per MIL-A-8625F, Type II, Class 2, .0004-.0010" (.4 - 1 mils) Job: 21332	Rev: C PO: PO36924	Line: 1
3 ea	Part: D5354-042 Clamp Black Anodize per MIL-A-8625F, Type II, Class 2, .0004-.0010" (.4 - 1 mils) Job: 21333	Rev: C PO: PO36924	Line: 2
4 ea	Part: D5355-041 Clamp Black Anodize per MIL-A-8625F, Type II, Class 2, .0004-.0010" (.4 - 1 mils) Job: 21334	Rev: C PO: PO36924	Line: 3
1 ea	Part: ADMINISTRATION FEE Administrative Fee Job: 21335	Rev: N/A PO: PO36924	Line: 4-5
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>07/07/2017</u> Certified Signature: <u>[Signature]</u> Receiver Signature: _____ A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt. Made in Canada.			